

EXPLO Systems Inc

Camp Minden, Webster Parish, LA



Magazine Explosion –
Oct. 2012



Improper storage of M6 Propellant –
Nov. 2012

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EPA Region 6 Superfund Division
February 14, 2014

ISSUE: 18M lbs of explosive materials in 97 filled magazines



18 M lbs of Explosives in 97 magazines

- **15 M lbs. of M6 Propellant**
- 128 lbs. of black powder
- 200 lbs. of Composition H6
- Four 50-gallon drums of ammonium perchlorate
- Two 50-gallon drums and 3-50 lb. boxes of Explosive D (ammonium picrate)
- 109,000 lbs. of M30 propellant
- 320,000 lbs. of Clean Burning Incendiary (CBI)
- 661,000 lbs. of Nitrocellulose
- 1.817 million lbs. of Tritonal (aluminum/TNT) mixture
- Unknown volume of Red Water (water contaminated with TNT)
- Effluent associated with the Super Critical Water Oxidation Unit (SCWO)

Mixed Explosives within Storage Magazines

OUTSIDE EXPLOSIVE
STORAGE MAGAZINE



EXPLOSIVE STORAGE
MAGAZINE AFTER
EXPLOSION – OCT. 2012



DRAFT

Mixed Explosives within Storage Magazines

ALUMINUM/TNT AND M6
PROPELLANT – SPILLING
CONTENTS



ALUMINUM/TNT AND M6
PROPELLANT – STACKED
AND FALLING OVER



Signed AOC with PRPs – General Dynamics/ATK

- AOC includes removal and disposal of ~3M lbs. of explosives:
 - 200 lbs. of Composition H6
 - 109, 000 lbs of M30 propellant
 - All nitrocellulose in containers identified as being shipped by ATK or at ATK's direction from any ATK facility to the Site
 - All nitrocellulose/propellant powder in containers identified as being shipped by St. Mark's Powder or at St. Mark's Powder's direction from any St. Mark's Powder facility to the Site
 - 1.817-2.2 million lbs. of tritonal mixed with tar/aluminum and TNT mixture and 133,836 pounds of "tritonal and tar mixture."
- Work scheduled to begin April 2014
- ~6-9 months to complete removal



Imminent Explosive Risk

- **15 M lbs. of M6 Propellant with Rapidly Deteriorating Stability**
 - As Propellant ages, stabilizer degrades resulting in auto-ignition and explosion
- **DoD Explosives Safety Board Representatives and Explosives Experts Concerns:**
 - Explosion of magazine of M6 similar to Oct. 2012 magazine explosion
 - Complete destruction of magazine and 11 railcars
 - 7,000 –foot mushroom cloud
 - Shattered windows in Minden, LA – 4 miles away
 - Insufficient stabilizer to prevent auto-ignition and another magazine explosion
 - Imminent risk of magazine explosion by August 2015
 - Risk to Camp Minden and surrounding communities



Necessary Actions to Remove Threat

- Issuance of RCRA 7003 Order to DoD/US ARMY
- Approval of Action Memo to Initiate Removal Action
 - Removal and disposal of M6 Propellant and remaining Explosives
 - Cost: Action Memo Ceiling = (WILL BE PROVIDED 2/18)
 - Time Required – Approximately 2 years to complete Removal Action
 - (Estimated auto-ignition of M6 Propellant and magazine explosion by August 2015)



Completed Actions:

- Signed AOC – Removal of ~ 3M lbs. of Mixed Explosives
- GNL and AOC to DoD
- Draft RCRA 7003 – DoD
- Draft CERCLA AOC/UAO - LMD



Next Steps:

- Meeting with LDEQ, LSP, LMD on Feb. 25, 2014
- AOC/UAO Negotiation – DOD/LMD
- Fund–Lead Removal Action





MINDEN →

Magazines

Magazines

EXPLO

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